

Interface Configuration Commands

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CHAPTER 1 INTERFACE CONFIGURATION COMMANDS

1.1. Interface Configuration Commands

The following are interface configuration commands:

- Interface
- description
- bandwidth
- delay
- shutdown
- show interface
- show running-config interface

1.1.1. interface

Syntax

[no] interface *port*

To enter the interface configuration mode, run the above-mentioned command. If the logical port is inexistent, you have to create this port first and then enter the port mode. If the physical port is inexistent, the command will fail to be executed. The negative form of this command has different functions for the physical port and the logical port.

The **no interface physical-port** command is used to resume the default settings of the physical port.

The **no interface logical-port** command is used to delete the logical port.

Parameter

Parameter	Description
Port	Stands for the existent physical or logical port.

Default value

The default mode is not the port mode.

Usage guidelines

When you execute this command in configuration mode, you have to enable this command to be in port configuration mode first. When the port command is configured, you shall use the **exit** command to exit from the port mode.

Example

The following example shows how to enter the port mode of port g0/1.

```
Switch_config#  
Switch_config#interface gigaEthernet0/1  
Switch_config_g0/1#exit  
Switch_config#
```

1.1.2. description

Syntax

[no] description *line*

To set the description information of a port, run the above-mentioned command.

Parameter

Parameter	Description
line	Stands for the character string of the description information, among which space may exist.

Default value

There is no description information by default.

Usage guidelines

This command is configured in port configuration mode.

Example

The following example shows how to set the description information of port g0/1 to **up link**.

```
Switch_config# interface gigaEthernet0/1  
Switch_config_g0/1# description uplink
```

1.1.3. bandwidth

Syntax

[no] bandwidth *kilobps*

To set the bandwidth of an interface, ran the above-mentioned command.

Parameter

Parameter	Description
kilobps	Means the bandwidth of port, which ranges from 1 to 10000000 kbps.

Default value

The default bandwidths of the 100M port, gigabit port, 10G port and 100G are 1000000kbps, 10000000kbps, 100000000kbps and 1000000000kbps respectively.

Usage guidelines

This command is configured in port configuration mode.

Note:

The configured bandwidth does not mean the actual bandwidth of a port, but is used by some protocol to calculate the port cost.

Example

The following example shows how to set port g0/1 to 100000000.

```
Switch_config # interface gigaEthernet0/1
```

```
Switch_config_g0/1# bandwidth 100000000
```

1.1.4. delay

Syntax

[no] delay tensofmicroseconds

To set the delay of an interface, run the above-mentioned command.

Parameter

Parameter	Description
tensofmicroseconds	Port delay, in the range 1-10000000 (ten microseconds).

Default value

The default value of the delay is 1.

Usage guidelines

This command is configured in port configuration mode.

Example

The following example shows how to set the delay of an interface to 10.

```
Switch_config_g0/1# delay 10
```

1.1.5. shutdown

Syntax

[no] shutdown

To close a port, run **shutdown**; to restart a port, run **no shutdown**.

Parameter

N/A

Default value

The physical port is in **enabled** status by default.

Usage guidelines

This command can be used in port mode to open or close a port.

Example

The following example shows how to enable port g0/1.

```
Switch_config_g0/1#  
Switch_config_g0/1# no shutdown  
Switch_config_g0/1#
```

1.1.6. show interface

Syntax

```
show interface <port>
```

To browse the state of an interface, run the above-mentioned command.

Parameter

Parameter	Description
Port	Name of an interface If a specific port is not in the command, the system will show the statuses of all ports.

Default value

N/A

Usage guidelines

This command can be used in EXEC and configuration modes to show the physical status and packet reception statistics of a port.

Example

The following example shows the information about port g0/1:

```
Switch_config# show interface gigaEthernet 0/1  
GigaEthernet0/1 is administratively down, line protocol is down  
Hardware is Giga-Combo-FX, address is 00e0.0fe4.d083 (bia 00e0.0fe4.d083)  
MTU 1500 bytes, BW 1000000 kbit, DLY 10 usec  
Encapsulation ARPA  
Auto-duplex, Auto-speed  
flow-control off  
5 minutes input rate 0 bits/sec, 0 packets/sec  
5 minutes output rate 0 bits/sec, 0 packets/sec
```

```

Received 0 packets, 0 bytes
 0 broadcasts, 0 multicasts
 0 discard, 0 error, 0 PAUSE
 0 align, 0 FCS, 0 symbol
 0 jabber, 0 oversize, 0 undersize
 0 carriersense, 0 collision, 0 fragment
 0 L3 packets, 0 discards, 0 Header errors
Transmitted 0 packets, 0 bytes
 0 broadcasts, 0 multicasts
 0 discard, 0 error, 0 PAUSE
 0 sqetest, 0 deferred
 0 single, 0 multiple, 0 excessive, 0 late
 0 L3 forwards

```

1.1.7. show running-config interface

Syntax

```
show running-config interface port
```

To display the settings of a port, run the above-mentioned command.

Parameter

Parameter	Description
Port	Stands for the existent port.

Default value

N/A

Usage guidelines

This command can be executed in EXEC or configuration mode to browse the settings of a port.

Example

The following example shows the settings of port g1/1:

```
Switch_config#show running-config interface g0/1
```

```
Building configuration...
```

```
Current configuration:
```

```
!
```

```
interface GigaEthernet0/1
```

```
shutdown
description uplink
bandwidth 10000000
delay 10
Switch_config#
```

1.2. Configuration Example

The following example shows how to create a VLAN port, set its description information and IP address and browse the status and settings of this port.

```
Switch_config#
Switch_config# interface vlan1
Switch_config_v1# description uplink
Switch_config_v1#
Switch_config_v1# ip address 192.168.1.1 255.255.255.0
Switch_config_v1# exit
Switch_config#
Switch_config# show running-config interface vlan1
Building configuration...
Current configuration:
!
interface VLAN1
description uplink
ip address 192.168.1.1 255.255.255.0
Switch_config# show interface vlan1
VLAN1 is up, line protocol is down
Description uplink
Hardware is EtherSVI, Address is 00e0.0fe4.d06a(00e0.0fe4.d06a)
Interface address is 192.168.1.1/24
MTU 1500 bytes, BW 1000000 kbit, DLY 2000 usec
Encapsulation ARPA
ARP type: ARPA, ARP timeout 04:00:00 Peak input rate 0 pps, output 0 pps 0
packets input, 0 bytes
Received 0 broadcasts, 0 multicasts
0 mpls unicasts, 0 mpls multicasts, 0 mpls input discards
```


0 input errors, 0 input discards

0 packets output, 0 bytes

Transmitted 0 broadcasts, 0 multicasts

0 mpls unicasts, 0 mpls multicasts, 0 mpls output discards

0 output errors, 0 discards

Switch_config#